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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,223	04/20/2001	Rich Chen	MR1957-533	9197
4586	7590	08/15/2006	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			SHAPIRO, LEONID	
			ART UNIT	PAPER NUMBER
			2629	
DATE MAILED: 08/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/838,223	<b>Applicant(s)</b> CHEN, RICH	
	<b>Examiner</b> Leonid Shapiro	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 26-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the newly introduced limitations of claims: "graphical user interface PC peripheral input device, a standard key set coupled to the single-chip microprocessor, the standard transport protocol of a standard keyboard to the graphical user interface" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The newly introduced limitations of claims: “graphical user interface PC peripheral input device, a standard key set coupled to the single-chip microprocessor, the standard transport protocol of a standard keyboard to the graphical user interface” are not disclosed in the Specification.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 26-35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention:

The newly introduced limitations of claims: “graphical user interface PC peripheral input device, a standard key set coupled to the single-chip microprocessor, the standard transport protocol of a standard keyboard to the graphical user interface” are not disclosed in the Specification or shown in the Figures.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 26, 30-35 are rejected under 35 U.S.C. 102(b) as being unpatentable over Allen (US Patent No. 5,144,422) in view of Swonk (US Patent No. 5,867,729).

As to claim 26, Allen teaches an auxiliary device for editing documents (See Figs 1-2, items 28, 28', Col. 1, Lines 10-14), comprising:

a peripheral input device having an internal circuit with a single-chip microprocessor (See Fig. 1-2, items 28, 28', Col. 5, Lines 35-38 and Col. 6, Lines 10-15);

a standard key set disposed on the input device (See Fig. 1-2, item 24);  
and

a direct access modular key set with a document editing function (See Figs 1-2, items 28, 28', Col. 1, Lines 10-14 and Col. 4, Lines 42-44); the direct access modular set being arranged on peripheral input device (See Fig. 2, item 28', Col. 6, Lines 4-21) and connected to an I/O bus of single-chip microprocessor (See Figs. 1-2, items 28, 28', Col. 5, Lines 35-38 and Col. 6, Lines 10-15); single-chip microprocessor generating a pseudo composite-key code corresponding to a individual key in the modular key set

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pressed by a user (See Figs.1-2, items 28, 28', from Col. 4, Line 66 to Col. 5, Line 14); the pseudo composite-key code being formed by the group of codes representing simultaneous key operation (See Col. 6, Lines 22-29), codes representing sequential key switch operation, and combination to execute specific action (in reference cut, paste and copy) (See Figs. 1-5, items 34, 36, Col. 5, Lines 38-42), whereby the user can directly edit a document by using the direct access modular key set provided on the computer keyboard without chording or memorize the combination keys, wherein pressing the direct access modular key with single touch of direct access modular key can launch pre-define function directly (See Figs.1-5, items 34, 36, Col. 5, Lines 12-14); modular key set including a cut key, a paste key, a copy key (See Figs 1-5, items 34, 36, Col. 5, Lines 38-42), the direct access modular key not require additional hardware (such as external ROM, separate cable), processing, complex driver support except the code-conversion application software; the direct access modular keys being all set on the input device (See Fig. 2, item 28'); the pseudo composite code is send through ports by one cable (See Fig. 2, items 28', 34, Col. 6, Lines 4-21).

Allen does not disclose the direct access modular key set includes a short-cut key provided on the keyboard to launch an application program without a driver program by a single touch of the short-cut key.

Swonk teaches a short-cut key provided on the keyboard to launch an application program without a driver program by a single touch of the short-cut key See Col. 1, Lines 27-33).

It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate teachings of Swonk in Allen apparatus in order to provide a simple and efficient system (See Col. 2, Lines 25-29 in Swonk reference).

As to claim 30, Allen teaches the code-conversion application software transfer specific code to pseudo composite-key code, corresponding to the cut, paste and copy keys (See Figs. 1-5, items 34, 36, Col. 5, Lines 38-42) corresponding to the pseudo composite-key code (See Col.6, Lines 22-29).

As to claims 31-35, Allen teaches the code-conversion application software transfer specific code to pseudo composite-key code, corresponding to the cut, paste and copy keys (See Figs. 1-5, items 34, 36, Col. 5, Lines 38-42).

Allen does not show a modular key set (keyboard extension in the Allen reference) includes a mark key, redo key, undo key,....

Since Allen teaches that the data manipulation keypad may be reprogrammed by the user (See Col. 5, Lines 42-50), corresponding to the pseudo composite-key code (See Col.6, Lines 22-29), it would have been obvious to one of ordinary skill in the art at the time of invention to add (move) mark key or any key to the modular set in the Allen apparatus to identify a segment of a document to be copied or cut (including the combinations shown in claim 31 as being based on design choice of choosing certain key combination to do specific function) in order to expediently perform data manipulation operations (See Abstract in Allen reference).

As to claims 27-28 Swonk teaches a short-cut key provided on the keyboard to launch an application program without a driver program by a single touch of the short-cut key See Col. 1, Lines 27-33).

5. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen as aforementioned in claim 26 in view of Hsu et al. (US Patent No. 6,320,519 B1).

Allen does not show switch key with LED and a plurality of composite keys and the functions of the composite keys controlled by a switch key.

Hsu et al. teaches switch key (symbol key) with LED (for ScrollLock key) and a plurality of composite keys and the functions of the composite keys controlled by a switch key (See Fig. 1-2, item 15-26, in description See Col. 3, Line 37 and Col. 4, Lines 58-67, Col. 5, Lines 58-68).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement switch key to modify composite keys for redo, undo, bold, open, new, save, find, forward and function keys F1-F12 as shown by Hsu et al. in the Allen apparatus to use predetermined pseudo composite-key code of modular key set in order to switch a plurality of switchable keys between a first key code set and second key code set with a single modifier key (See Col. 2, Lines 17-20 in Hsu et al. reference).

### ***Response to Argument***

6. Applicant's arguments with respect to claims 26-35 have been considered but are moot in view of the new ground(s) of rejection.



### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Telephone inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS  
08.06.06



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